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Production Accuracy of Verb Morphology in Early EFL: Does Primary School CLIL Make a Difference?

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1. Introduction

- 1 Content and Language Integrated Learning (CLIL) is nowadays an established model of bilingual education across the European Union, at primary, secondary and tertiary level. The manifold learning benefits advocated of CLIL have paved the way for bringing its implementation forward in the curriculum, resulting in an increase in primary school learners' amount and, especially, intensity of contact with the target language, which has been argued to be crucial for the development of the L2 competence in limited exposure contexts (Pérez-Vidal, 2009). Young CLIL learners are also more prone to develop long-lasting positive attitudes towards foreign language learning because they are introduced to the target language in a meaningful way, using it to learn and communicate about disciplinary content matter (Pladevall-Ballester, 2018). Primary school academic content is generally considered to be suitable for CLIL instruction because it is concrete and easily relatable to the learners' personal experiences, and this makes it remain accessible even if presented in a language that the children do not fully master (Halbach, 2009). However, the early introduction of

CLIL also poses several obstacles, especially with regard to the cognitive effort involved in processing a foreign language and new content simultaneously and mastering an additional literacy alongside that of the learners' mother tongue (Halbach, 2009).

- 2 The empirical evidence we have to date regarding the language learning outcomes of primary school CLIL programmes in Europe, in particular of CLIL provision in English as a foreign language (EFL), is oftentimes contradictory. Some studies have found an unequal development of receptive and productive language skills, with an advantage for the former (Stotz and Meuter (2003) for listening skills and Jiménez Catalán, Ruiz de Zarobe, and Cenoz (2006) for reading skills) or for the latter (Nieto Moreno de Diezmas (2016) for spoken production and interaction). Other studies have provided evidence for an across-the-board improvement in reading, listening, speaking, vocabulary knowledge and use of English (Pérez-Cañado, 2018). When intensity of exposure is controlled for and CLIL learners are matched for hours of exposure to their non-CLIL counterparts, the beneficial effects of CLIL disappear, both for receptive (Pladevall Ballester and Vallbona, 2016) and productive skills (Bret Blasco, 2014).
- 3 Furthermore, specific domains of the English L2 competence such as the use of verb morphology have remained completely unexplored in relation to primary education CLIL. The relationship between certain characteristics of L2 input and the emergence of tense-aspect English morphemes has been amply demonstrated in second language acquisition (Collins *et al.*, 2009; Goldschneider and DeKeyser, 2001), yet we are oblivious of how L2 input and practice provided through CLIL instruction may be relevant for the emergence of tense-aspect English morphemes at early ages of L2 instruction. The studies analysing the use of verb morphology by learners exposed to CLIL have been carried out in secondary school contexts (Basterrechea and García Mayo 2013, 2014; Hüttner and Rider-Bünemann, 2007; Lázaro Ibarrola, 2012; Lázaro Ibarrola and García Mayo, 2012; García Mayo and Villarreal Olaizola, 2011; Martínez Adrián and Gutiérrez Mangado, 2015a,b; Villarreal Olaizola and García Mayo, 2009), an age window during which morphosyntactic gains appear to increase in foreign language settings (Muñoz, 2006). No research is available to date on the impact of CLIL instruction on the use of verb morphology in the early stages of EFL learning despite the growing presence of this instructional approach in European primary schools and stakeholders' interest in the level of competence in EFL by the end of primary education. In this study, we explore the effects of CLIL on the production accuracy of suppletive and affixal verb forms in the oral narratives of 40 Catalan/Spanish bilingual learners of EFL in two primary schools in Catalonia, over a period of two academic years. To set the background to the study, we review the main findings regarding the emergence and use of verb morphology in the early stages of EFL learning in instructed settings. We then turn to the evidence available from CLIL contexts.

2. Verb Morphology in Early EFL: Evidence from Instructed Settings

- 4 The development of English L2 verb morphology in instructed settings will be discussed from a usage-based understanding of L2 learning, which assumes that learners are cognitively predisposed to discover patterns and regularities of use in the input they receive (Li and Shirai, 2000). The empirical evidence from tutored learners at the early stages of English L2 shows that, similar to what happens with children in English L1,

the learners' initial representation of verb inflections is tied to certain semantic redundancies between the meaning of the inflection and the inherent aspectual properties of the predicate and these semantic pairings translate into a systematic use of the progressive form as a marker of atelicity and of the past inflection *-ed* as a marker of telicity (Bardovi-Harlig, 1998; Bardovi-Harlig and Bergström, 1996; Bardovi-Harlig and Reynolds, 1995; Robison, 1995). Nevertheless, unlike what happens in L1 acquisition where children gradually relax these initial one-to-one pairings and move on to a fully grammaticalised use of verb morphology, L2 learners are bound by semantic prototypes for longer, even at very advanced L2 stages, as they struggle to uncover the full range of meanings and discourse functions of tense-aspect inflections (Vraciu, 2013).

- 5 Within this input-based emergentist model of L2 verb morphology development, instruction plays a key role in that it affects the input the learners receive (Bardovi-Harlig, 1999). The input available in the language class is often manipulated to draw learners' attention to the use of the verb forms and this may alter the distribution of prototypical and non-prototypical verb/predicate coalitions. Moreover, meta-linguistic explanations provided through instruction often rely on oversimplified rules of thumb which, in the difficult task of presenting grammar progressively, “overlook” more marked uses of tense-aspect forms. EFL learners might not have enough and/or relevant exposure to input to acquire these uses on their own and, even when exposure is abundant and/or relevant, instruction may not allow learners to see beyond the strict dichotomies taught in class.
- 6 As a meaning-based approach to L2 learning, CLIL has been argued to open up the range of linguistic contexts in which the learners encounter the L2 and, in so doing, to create opportunities for learners to expand their linguistic repertoire to discipline-specific genres and academic communicative functions, domains which are not typically touched upon in the standard EFL class (Pérez-Vidal, 2009). CLIL instruction also provides learners with real and relevant input which motivates them to process meaning in relation to subject-matter topics, a key psycholinguistic process in the development of L2 (Muñoz, 2007). Nonetheless, while L2 exposure through CLIL may be qualitatively different from exposure through EFL teaching only, it remains to see whether CLIL prompts learners into noticing (Schmidt, 1994, 2001) and, subsequently, using L2 forms accurately. In the following section we review several studies that have operationalised this L2 form noticing as performance accuracy in L2 verb morphology use in CLIL vs. non-CLIL settings.

3. The Development of Verb Morphology in CLIL

- 7 As already mentioned, the evidence regarding the impact of CLIL instruction on the use of verb morphology in EFL comes exclusively from secondary school learners. Hüttner and Rieder-Bünemann (2007) found in a cross-sectional study that 44 German L1 secondary school children aged 12 receiving CLIL were more accurate than their non-CLIL counterparts on supplying the third person singular *-s* in an oral narrative task and made non-arbitrary switches from past to present. Studies involving older children have also found a positive impact of CLIL on the development of verb morphology, though generally limited to the domain of irregular past verbs. In a 2-year longitudinal study with 26 Basque/Spanish bilinguals aged 13, Lázaro Ibarrola (2012) showed that

the CLIL group had higher rates of inflected verbs and supplied significantly more irregular past forms than the non-CLIL group in an oral narrative task, both at the onset and the end of the data collection. The provision of verb inflections significantly increased in the CLIL group during the period of the study, whereas it remained stable in the non-CLIL group. This increase affected the irregular verb forms while affixal inflections remained stable. Along the same lines, Lázaro Ibarrola and García Mayo (2012) also found a significant increase over two years regarding the correct use of inflected lexical verbs in the oral production of 15 Basque-Spanish high-school learners of English, aged 13 at the beginning of the study and enrolled in CLIL classes. This improvement was exclusively due to a more accurate use of irregular past forms. According to the authors, these results indicate that CLIL learners do not use verb inflections productively because irregular verb forms are processed as lexical items, which is different from the rule-governed processing required for learning affixal morphology. Consequently, despite the positive impact that CLIL may have on the use of irregular past forms, it does not seem to speed up the deployment of affixal L2 verb morphology.

- 8 Several studies have gone further into the analysis of verb morphology and focused on the impact of CLIL on the development of suppletive (*be* auxiliary and copula) vs. affixal morphology (simple present *-s*, regular past tense *-ed*). In a cross-sectional study carried out in three high schools in the Basque Country, Villarreal and García Mayo (2009) showed that the CLIL group omitted significantly fewer affixal inflections than the non-CLIL group, but both groups had the same omission rate for the suppletive forms. In a subsequent study, García Mayo and Villarreal Olaizola (2011) conducted a longitudinal follow-up on the development of suppletive and affixal tense and agreement morphemes with 40 CLIL and 38 non-CLIL learners in the Basque country aged 14/15 at the beginning of the data collection. The findings showed the existence of similar rates of suppletive and affixal morphology omission as well as more affixal than suppletive omission in both CLIL and non-CLIL groups, at all testing times. These results indicate that CLIL may have a limited effect on the development of verb morphology when a certain threshold of L2 competence has been reached.
- 9 Furthermore, no differences seem to exist between CLIL and non-CLIL learners with regard to the range of verb forms used. In a cross-sectional study carried out by Martínez Adrián and Gutiérrez Mangado (2015a) comparing a CLIL group and a non-CLIL group of Basque/Spanish bilinguals aged 14, no statistically significant differences were found between the two groups in terms of the variety of verb forms used in an oral narrative task. Both groups used mainly the present tense and to a lesser extent the progressive form and the past tense.
- 10 The studies reviewed so far present comparisons in which the CLIL groups had received substantially more overall exposure to English L2 than the non-CLIL groups at the time of testing. When CLIL and non-CLIL groups are matched for hours of exposure, learners that receive EFL-only instruction outperform their CLIL counterparts. Martínez Adrián and Gutiérrez Mangado (2015b) compared in a cross-sectional study the oral production of a CLIL group of 13 teenagers aged 14-15 with two non-CLIL groups, one of similar age to the CLIL group and with a similar amount of exposure to English L2, and the other two grades ahead and with less exposure to the target language. The older non-CLIL group and the CLIL group outstripped the similar age non-CLIL group in terms of overall L2 proficiency as measured by the Oxford Placement Test, whereas no

differences were found between the CLIL group and their older non-CLIL counterparts. Regarding the accuracy of use of verb inflections, the non-CLIL learners that were two years ahead of the CLIL students showed the highest rates of accuracy in supplying third person -s, regular past -ed and irregular lexical verbs.

- 11 Finally, Basterrechea and García Mayo (2014) explored the connection between L2 form noticing and production accuracy in CLIL vs. non-CLIL contexts, comparing the oral performance of 54 CLIL and 62 non-CLIL teenagers (aged 15-19) in a dictogloss task in EFL. The data showed that the CLIL learners noticed and produced more accurate instances of the 3rd person singular -s than the non-CLIL learners, yet this difference did not reach statistical significance.
- 12 To conclude, the empirical evidence available to date supports, to a certain extent, the claim that CLIL instruction has a beneficial effect on the development of verb morphology in EFL, particularly in secondary education. Nonetheless, the evidence is less robust when CLIL and non-CLIL learners are matched for amount of exposure, and lacking altogether from the early stages of instructed EFL in primary education settings. Documenting a positive impact of CLIL on young learners' mastery of L2 verb morphology may endorse the implementation of such programmes in primary education. The aim of the present study is to measure the impact of CLIL instruction on the production accuracy of suppletive and affixal verb morphology in the oral narratives of EFL primary school learners as opposed to the impact of EFL-only instruction over a period of two academic years. Production accuracy will be operationalised through the following measures: omission in obligatory contexts, targetlike use and erroneous verb forms. We set out to answer three research questions:
 - 1) Do primary school CLIL learners omit suppletive and affixal morphology less than their non-CLIL counterparts?
 - 2) Do primary school CLIL learners make a more target language-like use (TLU) of suppletive and affixal morphology than their non-CLIL counterparts?
 - 3) Do primary school CLIL learners make fewer errors with suppletive and affixal verb forms than their non-CLIL counterparts?

4. Method

4.1 Participants

- 13 The participants in this longitudinal study were 40 Catalan/Spanish bilingual learners of EFL enrolled in two Catalan charter schools with comparable socio-demographic characteristics, which began implementing CLIL at the onset of the present research study. At the first data collection, the learners were starting 5th grade and were aged 9-10. At the end of the study, the participants were finishing 6th grade and were aged 11-12. The non-CLIL group consisted of twenty learners (13 females, 7 males) who received only regular EFL classes (*i.e.*, 3 hours per week) and the CLIL group consisted of twenty learners (4 females, 16 males) who received their regular EFL sessions plus an additional hour per week of CLIL science (*i.e.*, 4 hours of English L2 per week in total). Participants were sampled at the beginning of the study on account of their English scores in the previous academic year in order to include both high, mid and low achievers. The groups were also matched in terms of extracurricular exposure to English.

- 14 To avoid instructional differences for the sake of the research design, the participants in the study were sampled from subsequent cohorts in the same school (*i.e.*, the non-CLIL group were 5th grade in 2010 and the CLIL group were 5th grade in 2011). Both cohorts in the same school had the same EFL teacher. The two groups had a similar mean previous in-class exposure to English irrespective of the school (*i.e.*, 420 hours in one school and 437 hours in the other) at the start of the study.
- 15 The EFL lessons followed the Catalan foreign language curriculum for primary education, focusing primarily on the development of the receptive and productive language skills through theme-based activities and tasks on topics such as food, clothes, the house, etc. The CLIL lessons were centred around topics such as the cell, plants, vertebrate and invertebrate animals. The CLIL teachers were EFL teachers with no previous experience in teaching CLIL, but who had attended a CLIL training course before the implementation of the programme in their schools. Class observations revealed that the CLIL instruction was mostly oriented towards content transmission. The teachers lectured about a topic, asked some questions to the students to check comprehension, did activities and collaborative tasks to practise vocabulary, writing and reading skills and carried out scientific experiments. They provided limited corrective feedback on language use. Learners rarely used the L2 to answer the teacher's questions or to interact with their peers, which drastically limited their L2 production opportunities in the CLIL class.

4.2 Design and Procedure

- 16 The research design adopted was that of a quasi-experimental study, with a control group (*i.e.*, the non-CLIL group) and a test group (*i.e.*, CLIL). The independent variables were the type of instruction (*i.e.*, CLIL vs. non-CLIL) and the time (*i.e.*, T0 to T3). The dependent variables were omission rate, TLU rate and error rate for suppletive verb forms, namely copula *be* and auxiliary *be*, and for affixal inflections, namely present *-s*, progressive *-ing* and regular past *-ed* at each of data collection times (T0 to T3). The choice of these verb forms was made on account of the fact that L2 learners seem to master suppletive *be* forms before the present *-s* and the regular past *-ed* (Zobl and Liceras, 1994) and, also, because they are representative of both early (*-ing* and *-ed*) and late (*-s*) emergence affixal morphemes (Housen, 2002).
- 17 Data was collected longitudinally, at four data collection times during two academic years (*i.e.*, grades 5th and 6th). In order to measure the specific contribution of CLIL instruction, we controlled for intensity of exposure to the target language. Since the CLIL group had an additional hour of exposure per week and exposure was to be kept constant between the two groups, the timing of the data collection in the two cohorts was not synchronous, as can be seen in Table 1 below. T0 corresponded to the start of the study (beginning of 5th grade); T1 corresponded to 105 hours of exposure, T2 to 141 hours of exposure and T3 to 210 hours of exposure. The amount of CLIL received up to each data collection time represented approximately a fourth of the total exposure at that time (25%).

Table 1. Summary of data collection times in each group.

Group	School Years		
	2010 -2011	2011-2012	2012-2013
Non-CLIL (N= 20)	T0 → T1 (0h) (105h)	T2 → T3 (141h) (210h)	
CLIL (N= 20)		T0 → T1 (0h) (105h)	T2 → T3 (141h) (210h)

4.3 Instrument

- 18 All learners were asked to narrate a 6-cartoon story originally designed by Heaton (1966) and used as an elicitation task in L2 verb morphology studies previously carried out in the Catalan instructed context (see Muñoz and Gilabert, 2011). Learners were asked to tell the story to the researcher using the following prompt: "This is the story of a boy, a girl, a mum and their dog. Have a look at the pictures and tell me the story." This prompt was neutral in terms of the temporal anchor of the story. All narratives were audio-recorded on the school premises, with permission from the headmaster and parents. Throughout the recording, the research prompted the children to participate in English and helped them when/if necessary, with unknown vocabulary in English.

4.4 Data Analysis

- 19 Production accuracy was measured by means of rates of omission in obligatory contexts (Ionin and Wexler, 2002) and targetlike vs. erroneous use of verb inflections (Pica, 1983). Obligatory contexts were determined on the basis of the definition in Ionin and Wexler (2002), namely "those contexts in which the morpheme would normally be used in adult English" (105). They included utterances in which the verb morphology was used targetlike, incorrectly or was omitted, both in finite and non-finite contexts. Example (1) below from the CLIL production at T1 illustrates all these contexts:

(1) girl and boy says [error -s] bye # and mum ## says [TLU -s] bye . ## girl and boy
hmm@p mountain and # sun hmm@p # co [/] cows # eating [omission aux be] [/]
eating hmm@p

- 20 Provision of verb morphology in non-obligatory contexts (e.g., with present simple plural predicates) was also recorded in order to calculate the rate of targetlike use of suppletive and affixal forms. Example (2) from the non-CLIL production at T3 illustrates this type of context in our corpus:

(2) the boy and the girl put the foo [/] one food in the basket and [/] and the [/]
and walks to a mount

- 21 We disregarded the following types of utterances: formulaic utterances, incomplete or incomprehensible utterances, utterances that mirrored the researcher's prompts, negative utterances. Repeated instances of the same predicate (see example (1) above) were counted only once. Progressive verb phrases were counted as two obligatory contexts, one for the auxiliary *be* and the other one for the progressive inflection *-ing*. Correct irregular present and past forms were also disregarded on account of the fact

that these forms are processed differently from affixal morphology (Lázaro Ibarrola and García Mayo, 2012).

- 22 The analysis was carried out on verb tokens, treating repetition as mentioned above. Omission rates were calculated as a percentage of the total number of obligatory contexts whereas targetlike and erroneous use were calculated as a percentage of the total number of obligatory and non-obligatory contexts.
- 23 Production accuracy was measured in terms of achievement at the different data collection times and by means of group progress during year 1 (*i.e.*, subtracting rates at T0 from rates at T1) and year 2 (*i.e.*, subtracting rates at T2 from rates at T3). A series of Kolmogorov-Smirnov tests performed with the Lilliefors correction on all the dependent variables in the study showed that most of the data in both groups were not normally distributed. Therefore, non-parametric tests were chosen for the inferential statistics. Inter-group comparisons were performed by means of repeated Mann-Whitney U tests. The level of expected statistical probability was established at $p \leq .05$. We used the second language acquisition field-specific benchmarks established by Plonsky and Oswald (2014) to interpret effect size, with d values around .4 considered small, .70 medium and 1.00 large. Given the unbalanced distribution of male and female participants within the two groups, additional Mann-Whitney U tests were run with gender as an independent variable for a robustness check. No gender-related differences were found between groups on the variables that are reported as statistically significant in the study.

5. Results

5.1 Omission

- 24 No statistically significant differences were found between the two groups with respect to omission of suppletive and affixal morphology at any of the data collection times (Table 2). Groups pattern similarly in that there is, generally, more affixal than suppletive morphology omission, though this dominance is more clear-cut in the oral production of the non-CLIL than of the CLIL group.

Table 2. Overall suppletive and affixal omission (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
Omission suppletive	T0	7.10	13.70	3.46	8.88	$z=-.796$; $p=.426$	$d=0.32$
	T1	16.88	23.04	7.33	13.21	$z=-1.259$; $p=.208$	$d=0.51$
	T2	7.07	15.48	6.72	12.60	$z=-.267$; $p=.790$	$d=0.03$
	T3	9.86	14.57	3.63	9.92	$z=-1.720$; $p=.086$	$d=0.50$
Omission affixal	T0	13.56	25.05	29.91	41.39	$z=-.789$; $p=.430$	$d=-0.48$
	T1	16.16	26.20	29.34	38.71	$z=-.964$; $p=.335$	$d=-0.40$
	T2	38.02	34.76	22.63	28.36	$z=-1.514$; $p=.130$	$d=0.49$
	T3	22.72	21.27	35.71	40.56	$z=-.474$; $p=.635$	$d=-0.40$

- 25 Figure 1 shows the evolution of the progress rates for suppletive and affixal omission at T1 (i.e., during year 1) and at T3 (i.e., during year 2) in the two groups. In terms of suppletive omission, both groups experience very little progress at T1, slightly more negative in the case of the CLIL group (i.e., more omission at the end of the year than at the beginning). At T3, progress is negative in the case of the non-CLIL group and almost null in the CLIL group. No statistically significant differences were found between the two groups in any of the two years.

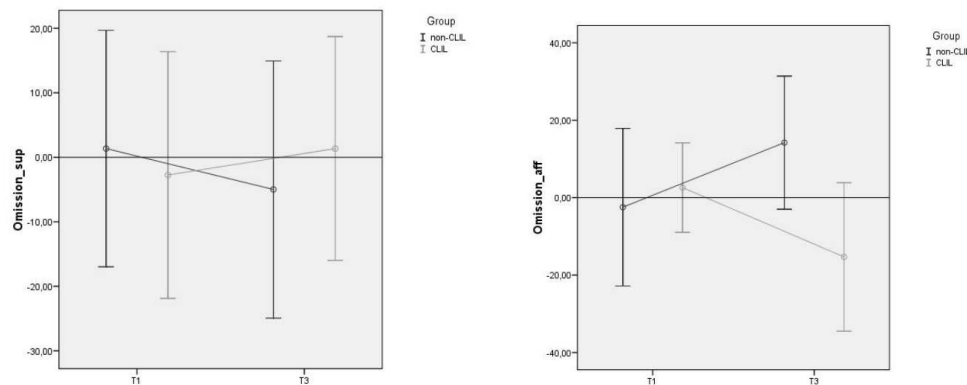


Figure 1. Progress rates for suppletive and affixal omission

- 26 Regarding affixal omission, both groups show almost no progress at T1, but differ in terms of progress at T3, which is positive in the non-CLIL group (i.e., more omission at the end than at the beginning of year 2) and negative in the CLIL group (i.e., more omission at the beginning than at the end of year 2). The difference between the two groups in terms of progress rates at T3 is statistically significant ($z=-1.999$, $p=.046$, $d=-0.88$), with a medium to large effect size.
- 27 Turning now to the omission of the different verb forms, no significant differences were found between the two groups with respect to the rates of copulative *be* and auxiliary *be* omission (Table 3). Suppletive omission affects mainly the auxiliary *be* in both groups. No instances of copulative *be* omission were found in the non-CLIL group,

and this type of omission occurred only marginally at the beginning of the second year of the study (T2) in the CLIL group.

Table 3. Omission copulative and auxiliary *be* (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
Omission cop <i>be</i>	T0	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$
	T1	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$
	T2	0.71	3.19	0	0	$z=-.975$; $p=.330$	$d=0.31$
	T3	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$
Omission aux <i>be</i>	T0	7.09	13.70	3.46	8.88	$z=-.796$; $p=.426$	$d=0.32$
	T1	16.88	23.04	7.33	13.21	$z=-1.259$; $p=.208$	$d=0.51$
	T2	6.36	14.75	6.72	12.60	$z=-.362$; $p=.718$	$d=-0.03$
	T3	9.86	14.57	3.63	9.92	$z=-1.720$; $p=.086$	$d=0.50$

- 28 With regard to progress during the two academic years, the data only allow us to analyse the evolution of auxiliary *be* omission (Figure 2). The two groups pattern similarly at T1 when both experience positive progress (i.e., more *be* omission at the end than at the beginning of year 1). At T3, progress remains positive in the CLIL group, whereas the non-CLIL group shows negative development (i.e., more *be* omission at the beginning than at the end of year 2). However, no statistically significant differences were found between the two groups in terms of progress rates of auxiliary *be* omission at any time.

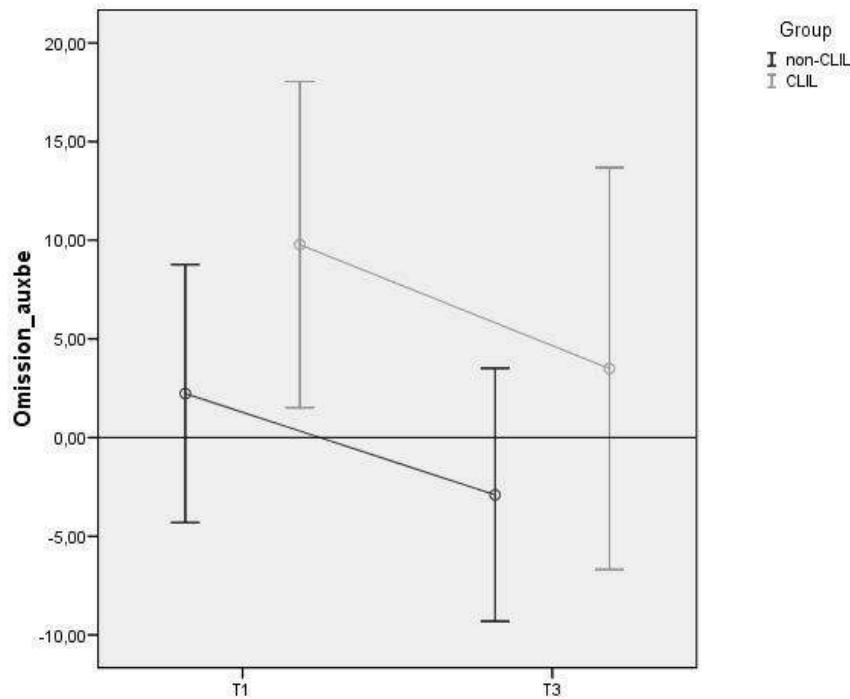


Figure 2. Progress rates for omission auxiliary *be*

- 29 Groups pattern alike in terms of rates of present *-s*, progressive *-ing* and past *-ed* omission, except at T1 when the non-CLIL group omits statistically more the 3rd person *-s* than the CLIL group (Table 4), and this trend has a medium effect size. Omission rates are low in the case of the simple past *-ed* in both groups on account of the scarcity of obligatory contexts for this inflection in the narrative. Omission is more frequent with the present *-s* than the progressive *-ing* in both groups, except at T1, when rates are balanced for the CLIL group.

Table 4. Omission of affixal inflections (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
Omission pres -s	T0	12.31	25.07	28.33	43.15	$z=-.467; p=.640$	$d=-0.45$
	T1	6.46	13.28	28.10	37.77	$z=-2.022; p=.043^*$	$d=-0.76$
	T2	34.32	36.47	16.18	22.36	$z=-1.660; p=.097$	$d=0.60$
	T3	16.08	21.97	33.21	41.17	$z=-1.172; p=.241$	$d=-0.52$
Omission prog -ing	T0	1.25	5.59	3.07	9.30	$z=-.669; p=.504$	$d=-0.24$
	T1	7.20	15.27	1.24	3.73	$z=-.985; p=.325$	$d=0.54$
	T2	3.69	7.94	3.81	9.98	$z=-.252; p=.801$	$d=0.01$
	T3	6.63	13.94	2.50	7.69	$z=-1.226; p=.220$	$d=0.37$
Omission past -ed	T0	0	0	0	0	$z=.000; p=1.000$	$d=n.a.$
	T1	2.50	11.18	0	0	$z=-.975; p=.330$	$d=0.32$
	T2	0	0	2.63	11.47	$z=-1.026; p=.305$	$d=-0.32$
	T3	0	0	0	0	$z=.000; p=1.000$	$d=n.a.$

- 30 With regard to progress rates for present simple -s omission (Figure 3), both groups experience negative development at T1. This downward trend is maintained only in the CLIL group at T3, whereas the non-CLIL group shows positive progress. A statistically significant difference was found between the two groups in terms of progress rates at T3 ($z=-2.706, p=.007, d=-0.93$), with a large effect size.

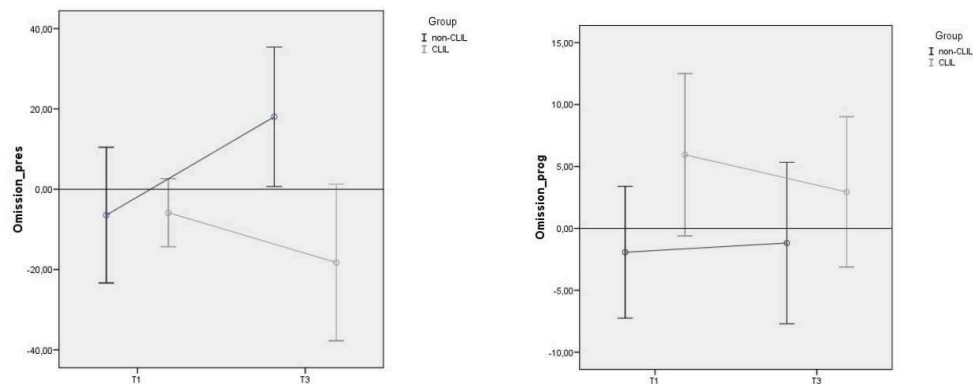


Figure 3. Progress rates for present simple -s and progressive -ing omission

- 31 With respect to progress rates for progressive -ing omission (Figure 3), the CLIL group experiences positive progress during the two academic years, whereas the non-CLIL group shows negative development in both years. No statistically significant differences were found between the two groups for progress rates of -ing omission at any time.

5.2 Target language-like use (TLU)

- 32 No significant differences were found between the two groups with respect to the TLU of suppletive and affixal morphology at any of the data collection times (Table 5). Rates of TLU are balanced for suppletive and affixal morphology in both groups.

Table 5. Overall suppletive and affixal TLU (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
TLU suppletive	T0	26.61	31.46	32.46	33.38	$z=-.637$; $p=.524$	$d=-0.18$
	T1	23.87	32.08	29.79	35.03	$z=-.685$; $p=.493$	$d=-0.18$
	T2	24.82	28.98	33.23	26.19	$z=-1.204$; $p=.199$	$d=-0.30$
	T3	26.17	19.82	28.07	30.44	$z=-.275$; $p=.784$	$d=-0.07$
TLU affixal	T0	17.99	19.22	14.02	20.10	$z=-.902$; $p=.367$	$d=5.29$
	T1	22.44	20.94	22.90	24.25	$z=-.248$; $p=.804$	$d=-0.02$
	T2	13.14	17.50	20.45	21.17	$z=-1.166$; $p=.244$	$d=-0.37$
	T3	26.75	16.90	18.82	22.48	$z=-1.287$; $p=.198$	$d=0.40$

- 33 Figure 4 shows the evolution of the progress rates for suppletive and affixal TLU. At T1, both groups experience very little progress with respect to suppletive TLU, slightly more negative in the case of the CLIL group. At T3, the trend for suppletive TLU deteriorates for the non-CLIL group, who experiences negative development (*i.e.*, less suppletive TLU at T3 than at T2), whereas the trend improves for the CLIL group, with slightly positive progress rates (*i.e.*, more suppletive TLU at T3 than at T2). No statistically significant differences were found between the groups with regard to their progress rates at any time.

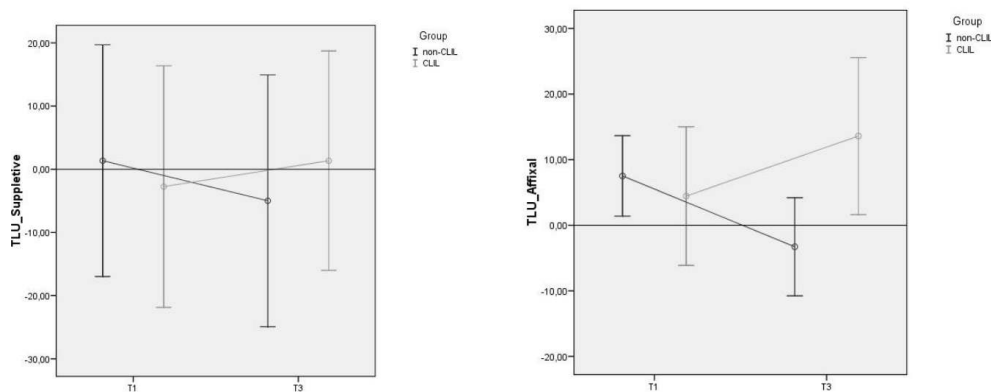


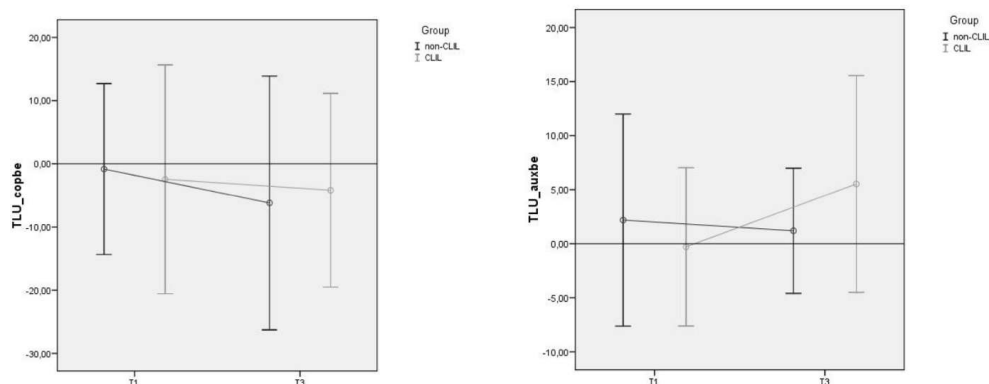
Figure 4. Progress rates for suppletive and affixal morphology TLU

- 34 With regard to progress rates for affixal TLU, both groups show positive progress during year 1. However, there is a statistically significant difference with a medium to large effect size in year 2 ($z=-2.821$, $p=.005$, $d=0.80$), when the CLIL group experiences positive progress, unlike their non-CLIL counterparts.
- 35 No statistically significant differences were found between the CLIL and the non-CLIL groups in terms of the TLU of copulative *be* and auxiliary *be* (Table 6). Rates of TLU are balanced for copulative and auxiliary *be* TLU in both groups.

Table 6. TLU of suppletive verb forms (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
TLU copulative <i>be</i>	T0	20.45	31.18	24.02	33.59	$z=-.203$; $p=.839$	$d=-0.11$
	T1	18	31.85	21.69	29.38	$z=-.834$; $p=.404$	$d=-0.12$
	T2	16.44	25.20	23.85	27.98	$z=-1.036$; $p=.300$	$d=-0.28$
	T3	12.26	15.39	17.40	31.18	$z=-.190$; $p=.849$	$d=-0.21$
TLU auxiliary <i>be</i>	T0	6.16	11.30	7.17	13.62	$z=-.018$; $p=.986$	$d=-0.08$
	T1	5.87	12.23	9.24	13.79	$z=-1.117$; $p=.264$	$d=-0.26$
	T2	8.38	13.10	9.38	15.08	$z=-.000$; $p=1.000$	$d=-0.07$
	T3	13.91	14.15	10.67	14.59	$z=-.853$; $p=.393$	$d=0.23$

- 36 As can be seen in Figure 5, both CLIL and non-CLIL groups experience negative development during the two academic years with regard to TLU of copulative *be*. No statistically significant differences were found between the two groups.

Figure 5. Progress rates for copulative and auxiliary *be* TLU

- 37 In the case of auxiliary *be* TLU, progress rates are moderately positive in both years for the non-CLIL group, whereas progress rates become clearly positive only at T3 for the CLIL group (Figure 5). Differences between groups are not statistically significant at any time.
- 38 No statistically significant differences were found between the CLIL and the non-CLIL group in terms of the TLU of present *-s*, progressive *-ing* and past simple *-ed* inflections (Table 7). Rates of TLU are higher for the present simple *-s* and the progressive *-ing* than for the simple past *-ed* in both groups, and both CLIL and non-CLIL learners produce more targetlike progressive forms than 3rd person present simple inflections at all data collection times.

Table 7. TLU of affixal verb forms (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
TLU pres -s	T0	1.70	4.42	4.32	14.01	$z=-.266$; $p=.790$	$d=-0.25$
	T1	4.06	11.91	10.28	20.35	$z=-.936$; $p=.349$	$d=-0.37$
	T2	3.21	7.42	6.61	11.37	$z=-.952$; $p=.341$	$d=-0.35$
	T3	3.21	6.87	4.96	8.50	$z=-.712$; $p=.477$	$d=-0.23$
TLU prog -ing	T0	16.29	18.55	9.70	17.21	$z=-1.316$; $p=.188$	$d=0.37$
	T1	15.71	20.75	11.44	16.21	$z=-.587$; $p=.557$	$d=0.23$
	T2	8.96	17.20	13.85	17.41	$z=-.802$; $p=.422$	$d=-0.28$
	T3	21.03	14.76	13.23	19.00	$z=-1.621$; $p=.105$	$d=0.46$
TLU past -ed	T0	0.00	0.00	0.00	0.00	$z=.000$; $p=1.000$	$d=n.a$
	T1	2.67	8.49	0.58	2.55	$z=-.608$; $p=.543$	$d=0.33$
	T2	0.96	3.33	0.00	0.00	$z=-1.396$; $p=.163$	$d=0.41$
	T3	2.50	11.18	0.63	2.80	$z=-.036$; $p=.971$	$d=0.23$

- 39 Both CLIL and non-CLIL groups show positive progress for TLU of -s at T1 whereas progress is null or negative at T3 (Figure 6). No statistically significant differences were found between the groups at any time.

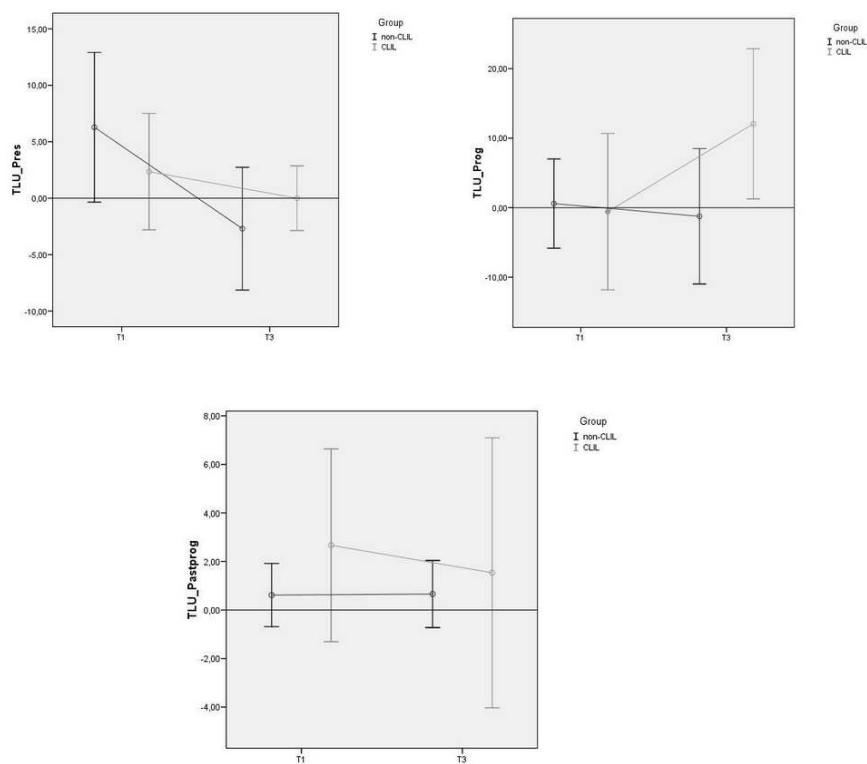


Figure 6. Progress rates for present simple -s, progressive -ing and past simple -ed TLU

- 40 With respect to TLU of progressive *-ing*, Figure 6 shows that there is almost no progress at T1 and at T3 for the non-CLIL group. The CLIL group experiences no progress at T1 but a clearly positive progress at T3. A statistically significant difference was found between the groups in terms of progress rates at T3 ($z=-2.837$, $p=.005$, $d=-0.61$), with a small to medium effect size.
- 41 The TLU of the simple past inflection is scarce in the production of our learners. There seems to be more sustained positive progress in the CLIL group than in the non-CLIL one (Figure 6), but inter-group differences for progress rates are not statistically significant.

5.3 Inflection errors

- 42 No significant differences were found between the two groups with respect to suppletive and affixal morphology errors at any of the data collection times (Table 8). Learners generally make a similar erroneous use of suppletive and affixal forms irrespective of instruction type and errors are less frequent in comparison with the TLU of suppletive and affixal morphology in both groups (see Table 5 above).

Table 8. Suppletive and affixal error (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
Error suppletive	T0	10.6	16.19	4.19	8.68	$z=-1.410$; $p=.159$	$d=0.49$
	T1	4.81	12.32	4.33	11.76	$z=-.357$; $p=.721$	$d=0.04$
	T2	3.71	7.87	4.44	9.48	$z=-.119$; $p=.905$	$d=-0.08$
	T3	5.64	10.03	16.24	30.11	$z=-1.105$; $p=.269$	$d=-0.47$
Error affixal	T0	7.63	15.49	9.76	16.27	$z=-.536$; $p=.592$	$d=-0.13$
	T1	6.97	15.59	8.48	17.70	$z=.092$; $p=.927$	$d=-0.09$
	T2	13.65	17.67	4.82	8.69	$z=-1.637$; $p=.102$	$d=0.63$
	T3	5.46	11.60	9.65	17.07	$z=-.801$; $p=.423$	$d=-0.29$

- 43 With respect to progress rates for errors with suppletive morphology, both groups move from null or negative progress at T1 (*i.e.*, more errors at the beginning than at the end of year 1) to positive progress at T3 (*i.e.*, more errors at the end than at the beginning of year 2) (Figure 7). No statistically significant differences were found between the two groups for progress rates in either of the two years.

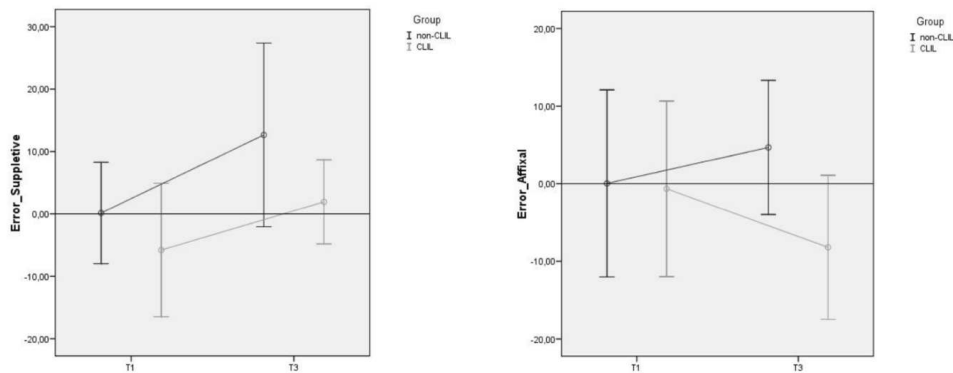


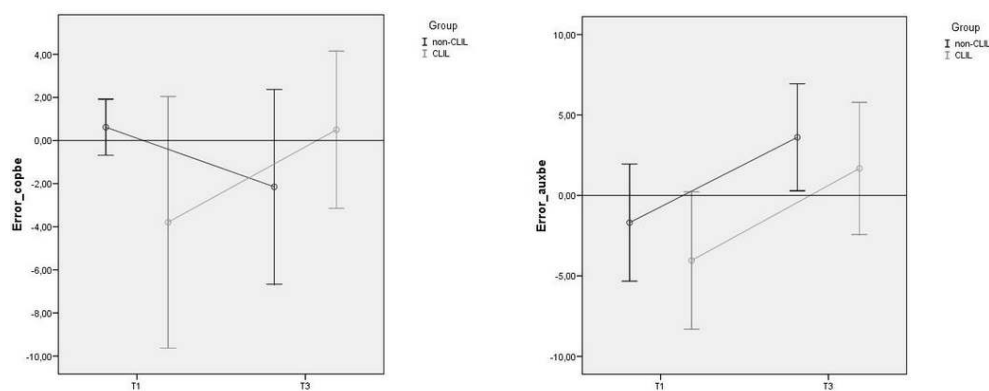
Figure 7. Progress rates for errors with suppletive and affixal forms

- 44 Groups pattern differently in terms of progress rates for erroneous affixal forms (Figure 7). The non-CLIL group moves from null progress at T1 to positive progress at T3. The CLIL group, on the other hand, moves from slight negative development at T1 to marked negative progress at T3. However, no statistically significant differences were found between the groups in terms of progress rates at any time.
- 45 Turning now to the different verb forms, groups pattern alike in terms of error rates for copulative and auxiliary *be* forms, except at T0 when the CLIL group makes significantly more mistakes with the copulative *be* than the non-CLIL group, who makes none (Table 9). Intra-group, error rates are low and balanced for the two suppletive forms at all data collection times in both groups.

Table 9. Errors with suppletive forms (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD	Mean non-CLIL	SD	Mann-Whitney U	Effect size
Error copulative <i>be</i>	T0	5.22	9.96	0	0	$z=-2.298$; $p=.022^*$	$d=0.74$
	T1	1.43	6.39	0.58	2.55	$z=-.000$; $p=1.000$	$d=0.17$
	T2	1.46	3.88	2.81	8.70	$z=-.266$; $p=.790$	$d=-0.20$
	T3	1.96	6.29	0.63	2.80	$z=-.651$; $p=.515$	$d=0.27$
Error auxiliary <i>be</i>	T0	4.04	9.12	2.13	6.57	$z=-.850$; $p=.395$	$d=0.24$
	T1	0	0	0.53	2.29	$z=-1.026$; $p=.305$	$d=-0.33$
	T2	1	3.08	0	0	$z=-1.397$; $p=.162$	$d=0.46$
	T3	2.68	7.86	3.43	6.76	$z=-.774$; $p=.439$	$d=-0.10$

- 46 Progress rates for errors with the copulative *be* show reversed trends for the two groups (Figure 8). The CLIL group experiences marked negative development at T1 and very moderate positive progress at T3, whereas the non-CLIL shows moderate positive progress at T1 and negative progress at T3. These differences between groups were not found to be statistically significant in either of the two years.

Figure 8. Progress rates for errors with copulative and auxiliary *be*

- 47 As for progress rates for auxiliary *be* erroneous forms, CLIL and non-CLIL groups display similar progress rates and trends (Figure 8). At T1, both groups show negative trends, whereas at T3 both groups experience positive progress. No statistically significant differences were found between the groups.
- 48 Groups pattern similarly also in terms of errors with the different affixal inflections (Table 10). No statistically significant differences were found in the inter-group comparison, except at T2, when the CLIL group produces significantly more erroneous *-ing* forms than the non-CLIL group, who produces none. No instances of non-targetlike use of the regular past *-ed* were found in any of the two groups at any of the data collection times. Intra-group, error rates are generally balanced between the present simple *-s* and the progressive *-ing*, except at T2 in the non-CLIL group, when learners make errors exclusively with the *-s* inflection.

Table 10. Errors with affixal forms (descriptive statistics and intergroup comparison)

Variable	Time	Mean CLIL	SD CLIL	Mean non-CLIL	SD non-CLIL	Mann-Whitney U	Effect size
Error pres -s	T0	4.05	11.82	8.04	15.89	$z=-1.123$; $p=.261$	$d=-0.28$
	T1	5.56	15.40	5.85	14.64	$z=-.357$; $p=.721$	$d=-0.19$
	T2	9.89	17.78	4.82	8.69	$z=-.531$; $p=.595$	$d=0.36$
	T3	3.67	11.34	7.15	14.28	$z=-1.452$; $p=.147$	$d=-0.27$
Error prog -ing	T0	3.58	11.43	1.72	5.91	$z=-.459$; $p=.649$	$d=0.20$
	T1	1.42	4.75	2.63	11.47	$z=-.486$; $p=.627$	$d=-0.14$
	T2	3.76	8.32	0.00	0.00	$z=-2.297$; $p=.022^*$	$d=0.64$
	T3	1.79	4.46	2.50	11.18	$z=-.961$; $p=.337$	$d=-0.08$
Error past -ed	T0	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$
	T1	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$
	T2	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$
	T3	0	0	0	0	$z=.000$; $p=1.000$	$d=n.a.$

- 49 The two groups show reversed trends for progress rates with erroneous *-s* use (Figure 9). In the CLIL group, progress is positive at T1 and negative at T3. In the non-CLIL group, progress is negative at T1 and positive at T3. However, no statistically significant differences were found between the two groups.

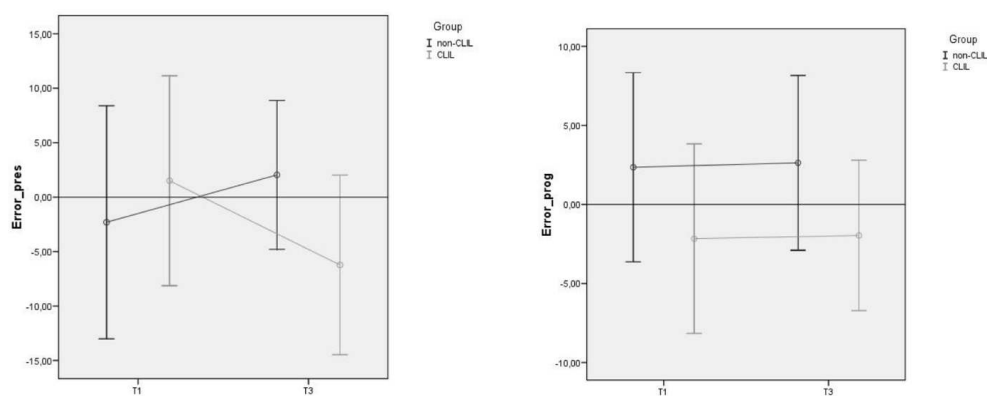


Figure 9. Progress rates for errors with present simple -s and progressive -ing

- 50 Progress rates for non-targetlike use of the progressive *-ing* are stable during the two years in both groups (Figure 9). The CLIL group experiences negative development both at T1 and T3, whereas the non-CLIL group experiences positive progress both at T1 and T3. No statistically significant differences were found between the two groups.

6. Discussion

- 51 On a general note, our findings indicate that there is no statistically significant impact of the CLIL approach on the development of verb morphology in primary education learners' English L2, at any of the four data collection times. Very few significant differences were found between CLIL and non-CLIL with regard to omission, TLU and error rates for suppletive and affixal verb forms in L2 oral production. When matched in terms of amount of exposure to the non-CLIL group, the contribution of CLIL to the development of very specific grammatical domains of the L2 competence such as verb morphology use gradually builds up over time, and becomes visible only in CLIL learners' progress rates in year 2 (*i.e.*, at T3). The overall similar behaviour of the CLIL and non-CLIL groups may be related to the fact that the CLIL programme reported in this study was minimal (*i.e.*, 1 hour per week), unlike the programmes reported in previous studies carried out in other regions of Spain, where learners received 4 to 5 hours of additional exposure through CLIL (*e.g.*, García Mayo and Villarreal Olaizola, 2011; Lázaro Ibarrola and García Mayo, 2012). Moreover, in the context of our schools, both CLIL and EFL teachers promoted a more implicit type of L2 learning, in line with how young learners approach L2 learning at this developmental stage but which requires many years of abundant input and meaningful interaction for observable gains in the L2 competence (DeKeyser and Larson-Hall, 2005; Muñoz, 2007). These conditions are far from what 3 hours of EFL and an additional hour of CLIL per week represent in terms of L2 exposure.
- 52 Turning now to the first research question, the primary school CLIL learners in our study do not omit suppletive and affixal morphology less often than their non-CLIL counterparts. The two groups pattern alike in that they show similar rates of suppletive and affixal omission at all data collection times and there is generally more affixal than suppletive omission in both groups. This is in line with findings from the early stages of English as a second language (Ionin and Wexler, 2002) and from the intermediate stages of EFL with teenage learners receiving CLIL (García Mayo and Villarreal Olaizola, 2011).

Suppletive omission affects mainly the auxiliary *be*, which corroborates the claim put forward by studies on the emergence of verb morphemes in English L2 that there is a time lag between the emergence of the progressive *-ing* form and the emergence of the progressive auxiliary (Dulay et al., 1982; Housen, 2002). A statistical difference was found between the two groups with regard to the polarity of the progress rate for affixal omission during the second year of the study. The non-CLIL group experiences positive progress (*i.e.*, affixal omission is higher at T3 than at T2), whereas the CLIL group shows negative development (*i.e.*, there is less affixal omission at T3 than at T2). This difference is triggered by the progress rate for *-s* omission, which remains statistically positive for the non-CLIL group in year 2 (*i.e.*, *-s* omission is higher at T3 than at T2), unlike in the CLIL group, who omit *-s* less at T3 than at T2. Descriptively, omission rates for *-s* are lower for the CLIL group than for the non-CLIL group at all data collection times, which may indicate that CLIL learners are more prone to supply the 3rd person singular present inflection in obligatory contexts (also Basterrechea and García Mayo, 2014) or that they resort to other verb forms in these contexts (*e.g.*, the progressive form). The *-s* omission was also reported to be high with ESL children (Ionin and Wexler, 2002) and is, therefore, a defining trait of young learners' oral production in English L2 irrespective of their learning context. A significant decrease in *-s* omission requires language-analytical skills which develop at an older age (García Mayo and Villarreal Olaizola, 2011). This maturational limitation could be overridden through explicit, form-focused instruction which has been shown to foster grammatical awareness not only in adult but also in young L2 learners (Lichtman, 2016; Roehr-Brackin and Tellier, 2019). As already mentioned, the L2 instruction received by our learners both in their CLIL and EFL classes was predominantly implicit, with limited explicit grammar instruction and, hence, little conducive of noticing verbal affixes.

- 53 With respect to the second research question, the primary school CLIL learners in our study do not make more TLU of suppletive and affixal morphology than their non-CLIL counterparts at the different data collection times. This differs from previous studies such as Hüttner and Rieder-Bünemann (2007) and Lázaro Ibarrola (2012) where higher rates of correctly inflected verbs were reported in the oral production of CLIL learners. When CLIL and non-CLIL groups are matched for amount of exposure, CLIL does not result in increased production accuracy in verb morphology use, at least not the minimal CLIL-component reported in this study. Other types of meaning-focused instruction such as the Canadian French immersion programmes also reported that learners did not achieve grammatical accuracy in tense marking even after a large number of hours of exposure to the target language at the end of primary education (Turnbull, Lapkin, Hart and Swain, 1998). A more systematic focus on form in content-based instructional approaches such as CLIL may be necessary for learners to notice less salient grammatical features such as verb morphology (Long, 1991; Pérez-Vidal, 2007).
- 54 The CLIL and the non-CLIL groups pattern alike in terms of achievement rates for TLU of suppletive and affixal morphology at the four data collection times. There is little change in the TLU of suppletive morphology during the two years of the study and the groups also progress at similar rates. Descriptively, learners in both groups make more TLU of suppletive than affixal morphology, which could indicate that these forms are mastered first, by means of the same lexical rote learning mechanisms as in the case of irregular verb forms (Pinker and Prince, 1994). The TLU of affixal morphology reveals several qualitative differences between the groups. First of all, regarding the range of

verb forms used, even though rates are very low in both groups, the CLIL group makes a more sustained use of the past inflection *-ed* than the non-CLIL group (*i.e.*, 2 learners at T1, 2 learners at T2 and 1 learner at T3 as opposed to only 1 learner at T1 and 1 at T3 in the non-CLIL group). While the data at hand do not allow us to draw any firm conclusions about the emergence of the regular past inflection, its wider spread in the production of the CLIL group may be related to the richer L2 input these learners were exposed to through the combination of standard EFL classes and the Science CLIL class. Secondly, the progressive form is the predominant form used targetlike in the production of the CLIL group whereas this dominance is not detected in the non-CLIL group. A closer look at the verb types encoded in the progressive form in the narratives of the CLIL learners reveals that they are normally durative-atelic predicates such as *prepare*, *look*, *cook*, *walk*. As already mentioned, durative-atelic predicates encoded in the progressive form constitute a prototypical form-meaning pairing characteristic of the early stages of verb morphology development in English L2, when learners look for semantic coherence between the meaning of the inflection and the meaning of the predicate (Li and Shirai, 2000). The dominance of the progressive form in the narratives of the CLIL learners may be an effect of the meaning processing mode promoted by this type of instruction which could strengthen learners' reliance on semantic prototypes in inferring the use of affixal morphology. As we will later on acknowledge, further evidence is needed to support this claim, collected through different elicitation tasks.

- 55 Turning now to the third and final research question in our study, CLIL learners do not make fewer errors than their non-CLIL counterparts at any of the data collection times, either with suppletive or affixal morphology. Suppletive morphology errors are infrequent in both groups, similar to what was observed in the production of ESL children (Ionin and Wexler 2002). The exception is the non-CLIL group's mean at T3. At a closer look, the surprisingly high number of errors at this data collection time is related to the overgeneralisation of the copulative *be* which is used as a placeholder for the irregular past form of the verb *eat* (*e.g.*, *he saw their dog is eat all the sandwiches*). This phenomenon was also observed by Ionin and Wexler (2002) in early ESL and by García Mayo, Lázaro Ibarrola and Liceras (2005) in early EFL and represents a substitute tense marking strategy. Errors are more representative of the use of affixal morphology, in particular in the non-CLIL group. While no significant differences were found between the groups in terms of achievement rates at the four data collection times, the non-CLIL group shows significant positive progress in year 2 (*i.e.*, more errors at T3 than at T2) as opposed to the CLIL group, who experiences negative development during the same year. This U-shaped patterned distribution is related mainly to errors with the simple present *-s* form. In our corpus, the overgeneralization of the present simple inflection occurs mainly in the context of coordinated subjects (*e.g.*, *in picture four the boy and the girl goes to the forest and # to camp there are two cows and it's sunny*), which further corroborates Lázaro Ibarrola's (2012) claim that the development of verb morphology in EFL by Spanish L1 learners is conditioned by the mastery of the pronominal-referential paradigm (also García Mayo, Lázaro Ibarrola and Liceras (2005)). The present simple inflection is also used in past contexts, in substitution of the irregular past form and as an agreement marker (*e.g.*, *and in the end in number six he see [//] they see that in the nest do not have the breakfast the dog eats*). Finally, no errors were found with regard to the use of the simple past *-ed* in any of the two groups. Similar to what was observed in the production of ESL children (Ionin and Wexler, 2002), the past tense marker is not overextended to non-past contexts in young learner EFL, irrespective of

instruction type. Nonetheless, one should bear in mind that the narrative used for data elicitation included very few obligatory contexts for this inflection and, consequently, more evidence is needed to support this claim.

Conclusion

- 56 This study has shown that a minimal CLIL programme (*i.e.*, 1 hour per week), in conjunction with EFL instruction, does not increase young learners' production accuracy in English L2 verb morphology but it has an impact on the range of verb inflections they use in picture-based narratives as well as on their progress in terms of affixal morphology omission and targetlike use of the progressive form after two years of instruction. These results are encouraging as for the concurrent implementation of CLIL and EFL instruction in primary education and call for a more intensive exposure through CLIL, with a more systematic focus on form (Long, 1991; Pérez-Vidal, 2007), to observe more robust effects on the development of grammatical domains of the L2 competence. Our results are also promising with regard to the potential long-term effects of CLIL on the use of L2 verb inflections, as CLIL learners in our study seem to be on a downward trend with regard to affixal errors.
- 57 Our study comes with a series of limitations. We were unable to balance the gender distribution in the CLIL and non-CLIL groups, which may have introduced a bias in the emerging distributional patterns. The analysis of the impact of instructional approaches such as CLIL on young learners' use of verb morphology would benefit from larger corpora, with more participants, more balanced in terms of gender. Moreover, the elicitation task used (*i.e.*, a picture-based narrative) may have prompted learners into a descriptive rather than narrative mode, which, in turn, may have resulted in higher rates of progressive form in CLIL learners' production. Young learner oral data needs to be elicited by means of other instruments, such as structured interviews, which would open the range of predicate types and obligatory contexts. Finally, a systematic analysis of the distribution of verb inflections on the different predicate types would allow us to clarify whether CLIL instruction strengthens learners' reliance on semantic prototypes in their interpretation of the progressive form. The exploration of the domain of verb morphology use in primary school CLIL contexts may reveal subtle effects of this type of instruction on the psycholinguistic mechanisms of EFL learning.

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ABSTRACTS

This study explores the impact of CLIL and standard EFL instruction on the use of verb morphology by 40 primary school Catalan/Spanish learners in an oral narrative task over a period of two academic years. The empirical evidence available to date comes from secondary school contexts and indicates that CLIL learners are more accurate using verb inflections than EFL-only learners in the early teens, whereas starting with the mid teens, CLIL has a ceiling effect on the development of verb morphology, with differences only in terms of higher production accuracy of irregular past forms (Hüettner and Rider-Bünemann, 2007; Lázaro Ibarrola, 2012; García Mayo and Villarreal Olaizola 2011). No research is available on the impact of CLIL instruction on the use of verb morphology in the early stages of EFL. Production accuracy was analysed in terms of omission, targetlike use and errors regarding suppletive and affixal verb forms. Our findings show that CLIL impacts on the intra-group progress rates for affixal omission, in particular -s omission, and targetlike use of the progressive form. The vehicular use of the target language in CLIL instruction seems to strengthen learners' reliance on semantic prototypes in their use of the progressive form.

Cet article propose une analyse contrastive des acquis grammaticaux de deux groupes en fin d'enseignement primaire en Espagne : un groupe d'élèves ayant suivi un apprentissage standard de l'anglais langue étrangère et un groupe ayant suivi un apprentissage intégré (type EMILE en

France). Les dernières études, effectuées en milieu secondaire, suggèrent que les apprenants ayant bénéficié d'un enseignement intégré ont un niveau plus avancé en matière de maîtrise des flexions verbales de l'anglais, que ceux ayant suivi uniquement des cours d'anglais langue étrangère classiques. Néanmoins, un effet plafond de verre se met en place après les deux premières années de l'enseignement secondaire (aux alentours de quatorze ans), et la tendance s'inverse dans la deuxième partie des années de collège, laissant une légère avance aux apprenants EMILE uniquement sur les verbes irréguliers au passé (Hüettner and Rider-Bünemann 2007; Lázaro Ibarrola 2012; García Mayo and Villarreal Olaizola 2010. Mais il n'existe pas d'étude sur l'apprentissage de la morphologie verbale au cours des deux premières années de l'apprentissage d'une langue étrangère intégré aux autres disciplines. Dans cette analyse sur corpus d'apprenants de primaire, nous montrons que l'absence de focalisation sur la forme handicape les apprenants de type EMILE dès le primaire, ne leur permettant pas de systématiser, en expression orale, les flexions verbales moins saillantes que le *s* de 3^{ème} personne ou le *ING*, de façon normée.

INDEX

Mots-clés: anglais langue étrangère (ALE), enseignement intégré à une discipline non linguistique, correction grammaticale, morphologie verbale, enseignement primaire

Keywords: CLIL, English as a Foreign Language (EFL), grammatical accuracy, verb morphology, primary school instruction

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